

Message

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**From:** Crosby-Vega, Terri [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=E439D8D14EAF4F8DA8661E95A3037052-CROSBY-VEGA, TERRI]  
**Sent:** 4/20/2017 7:26:04 PM  
**To:** Craig, Harry [Craig.Harry@epa.gov]  
**Subject:** RE: April 11, 2017 Open Burning At Holston Army Ammunition Plant-Photo for your records

Hi Harry,  
Are you going to attend the Demil Symposium?

**Terri Crosby-Vega**  
**Environmental Engineer**  
USEPA Region 4  
Atlanta Federal Center 9T25  
61 Forsyth Street SW  
Atlanta, GA 30303  
**404-562-8497**

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**From:** Craig, Harry  
**Sent:** Thursday, April 20, 2017 3:18 PM  
**To:** Diane Dopkin <diane.dopkin@emsus.com>  
**Cc:** Crosby-Vega, Terri <Crosby-Vega.Terri@epa.gov>; Gaines, Jeff <Gaines.Jeff@epa.gov>; Kohler, Amanda <Kohler.Amanda@epa.gov>; Shuster, Kenneth <Shuster.Kenneth@epa.gov>  
**Subject:** RE: April 11, 2017 Open Burning At Holston Army Ammunition Plant-Photo for your records

Diane,

Here is also a short fact sheet from the Europeans on demil technologies. The Small Arms Survey organization does very good reports on the status of demil technologies:

[http://www.smallarmssurvey.org/fileadmin/docs/H-Research\\_Notes/SAS-Research-Note-37.pdf](http://www.smallarmssurvey.org/fileadmin/docs/H-Research_Notes/SAS-Research-Note-37.pdf)

Regards,

Harry

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**From:** [Diane.Dopkin@emsus.com](mailto:Diane.Dopkin@emsus.com) [mailto:Diane.Dopkin@emsus.com]  
**Sent:** Thursday, April 20, 2017 12:13 PM  
**To:** Craig, Harry <Craig.Harry@epa.gov>  
**Cc:** Crosby-Vega, Terri <Crosby-Vega.Terri@epa.gov>; Gaines, Jeff <Gaines.Jeff@epa.gov>; Kohler, Amanda <Kohler.Amanda@epa.gov>; Shuster, Kenneth <Shuster.Kenneth@epa.gov>  
**Subject:** RE: April 11, 2017 Open Burning At Holston Army Ammunition Plant-Photo for your records

# Deliberative Process / Ex. 5

I appreciate the cc's.

Diane Dopkin  
Environmental Management Support, Inc.  
8601 Georgia Ave., Suite 500  
Silver Spring, MD 20910  
(301)589-5318, ext.22  
[www.emsus.com](http://www.emsus.com)

From: "Craig, Harry" <[Craig.Harry@epa.gov](mailto:Craig.Harry@epa.gov)>  
To: "Gaines, Jeff" <[Gaines.Jeff@epa.gov](mailto:Gaines.Jeff@epa.gov)>, "Shuster, Kenneth" <[Shuster.Kenneth@epa.gov](mailto:Shuster.Kenneth@epa.gov)>  
Cc: "Crosby-Vega, Terri" <[Crosby-Vega.Terri@epa.gov](mailto:Crosby-Vega.Terri@epa.gov)>, "Kohler, Amanda" <[Kohler.Amanda@epa.gov](mailto:Kohler.Amanda@epa.gov)>, Diane Dopkin <[diane.dopkin@emsus.com](mailto:diane.dopkin@emsus.com)>  
Date: 04/20/2017 03:06 PM  
Subject: RE: April 11, 2017 Open Burning At Holston Army Ammunition Plant-Photo for your records

**From:** Gaines, Jeff  
**Sent:** Wednesday, April 19, 2017 10:46 AM  
**To:** Craig, Harry <Craig.Harry@epa.gov>; Shuster, Kenneth <Shuster.Kenneth@epa.gov>  
**Cc:** Crosby-Vega, Terri <Crosby-Vega.Terri@epa.gov>; Kohler, Amanda <Kohler.Amanda@epa.gov>  
**Subject:** RE: April 11, 2017 Open Burning At Holston Army Ammunition Plant-Photo for your records

We just got off the phone with our contractor (EMS, Inc) on a status update on a task order we have them working on – identifying existing alternative treatment technologies to OB/OD. We've been forwarding them materials you've been providing us.

Jeff Gaines  
Phone: 703-308-8655

*"The most exciting phrase to hear in science, the one that heralds the most discoveries, is not "Eureka!" (I found it!) but "That's funny."'" — Isaac Asimov*  
*"Dulce et Decorum Est Desipere in Loco" — Josiah S. Carberry*

**From:** Craig, Harry  
**Sent:** Wednesday, April 19, 2017 1:35 PM  
**To:** Shuster, Kenneth <[Shuster.Kenneth@epa.gov](mailto:Shuster.Kenneth@epa.gov)>  
**Cc:** Gaines, Jeff <[Gaines.Jeff@epa.gov](mailto:Gaines.Jeff@epa.gov)>; Crosby-Vega, Terri <[Crosby-Vega.Terri@epa.gov](mailto:Crosby-Vega.Terri@epa.gov)>  
**Subject:** RE: April 11, 2017 Open Burning At Holston Army Ammunition Plant-Photo for your records

Ken,

Here is another good example of full scale treatment of alkaline (base) hydrolysis of rocket propellants containing energetics such as HMX, NG, and ammonium perchlorate.

Harry

**From:** Craig, Harry  
**Sent:** Wednesday, April 19, 2017 8:45 AM  
**To:** Shuster, Kenneth <[Shuster.Kenneth@epa.gov](mailto:Shuster.Kenneth@epa.gov)>  
**Cc:** Gaines, Jeff <[Gaines.Jeff@epa.gov](mailto:Gaines.Jeff@epa.gov)>; Crosby-Vega, Terri <[Crosby-Vega.Terri@epa.gov](mailto:Crosby-Vega.Terri@epa.gov)>  
**Subject:** FW: April 11, 2017 Open Burning At Holston Army Ammunition Plant-Photo for your records

Ken,

I'm not convinced that SCWO is the preferred technology in this situation. SCWO requires that wastes be in slurry form to treat it, and the process is very corrosive to materials and has problems with salt build up. I believe that rotary kiln incineration w/air pollution controls or alkaline hydrolysis would be effective and far less expensive technologies as alternatives to treat bulk RDX, HMX, and PBXs, and materials contaminated with these energetics.

Holston AAP manufactures RDX and HMX in the U.S. Probably should check what RCRA and Air Permits (if any) that Holston AAP currently has.

Regards,

Harry

**From:** Mark Toohey [mailto:[@gmail.com](mailto:Personal Email / Ex. 6)]  
**Sent:** Tuesday, April 18, 2017 6:05 PM  
**To:** Akers, Brad <[Akers.Brad@epa.gov](mailto:Akers.Brad@epa.gov)>; Craig, Harry <[Craig.Harry@epa.gov](mailto:Craig.Harry@epa.gov)>; Crosby-Vega, Terri <[Crosby-Vega.Terri@epa.gov](mailto:Crosby-Vega.Terri@epa.gov)>; [curry.ron@epa.gov](mailto:curry.ron@epa.gov); Feely, Ken <[Feely.Ken@epa.gov](mailto:Feely.Ken@epa.gov)>; Gaines, Jeff <[Gaines.Jeff@epa.gov](mailto:Gaines.Jeff@epa.gov)>; Galbraith, Michael <[Galbraith.Michael@epa.gov](mailto:Galbraith.Michael@epa.gov)>; Gray, David <[gray.david@epa.gov](mailto:gray.david@epa.gov)>; [lesser.ben@epa.gov](mailto:lesser.ben@epa.gov); Cooke, Maryt <[Cooke.Maryt@epa.gov](mailto:Cooke.Maryt@epa.gov)>; Page, Lee <[Page.Lee@epa.gov](mailto:Page.Lee@epa.gov)>; Palumbo, Janice <[Palumbo.Jan@epa.gov](mailto:Palumbo.Jan@epa.gov)>; Gerhard, Sasha <[Gerhard.Sasha@epa.gov](mailto:Gerhard.Sasha@epa.gov)>; Sasseville, Sonya <[Sasseville.Sonya@epa.gov](mailto:Sasseville.Sonya@epa.gov)>; Wanslow, Julie <[Wanslow.Julie@epa.gov](mailto:Wanslow.Julie@epa.gov)>; Waterson, Sara <[Waterson.Sara@epa.gov](mailto:Waterson.Sara@epa.gov)>; Watson, Sarah <[Watson.Sarah@epa.gov](mailto:Watson.Sarah@epa.gov)>; Garfinkel, Wayne <[Garfinkel.Wayne@epa.gov](mailto:Garfinkel.Wayne@epa.gov)>; Wilson, Michaelle <[Wilson.Michaelle@epa.gov](mailto:Wilson.Michaelle@epa.gov)>  
**Subject:** Fwd: April 11, 2017 Open Burning At Holston Army Ammunition Plant-Photo for your records

Ladies and Gentlemen,

We request a formal investigation of exactly what was being open air burned at HSAAP as indicated in this photograph.

The Tennessee Department of Environment and Conservation has thus far performed a perfunctory investigation which

has not yet been concluded. Additionally, we would like a response which includes the reason that HSAAP is not using

Super Critical Water Oxidation as an alternative to open burning as recommended in a March 2012 report from the U.S.

Army Corps of Engineers.

Thank you for your anticipated cooperation.

Mark and Connie Toohey

Personal Phone / Ex. 6

----- Forwarded message -----

From: **Mark Toohey** Personal Email / Ex. 6 @gmail.com>

Date: Tue, Apr 18, 2017 at 8:36 PM

Subject: Fwd: April 11, 2017 Open Burning At Holston Army Ammunition Plant-Photo for your records

To: Laura Olah <info@cswab.org>

Hi, Laura,

Here is a picture Connie took on April 11, 2017 of open burning at HSAAP while there was an open burn ban issued due to fire hazard.

They claim that it is a cage burn. You might have to scroll around on the picture to see the plume.

Best regards

Mark and Connie

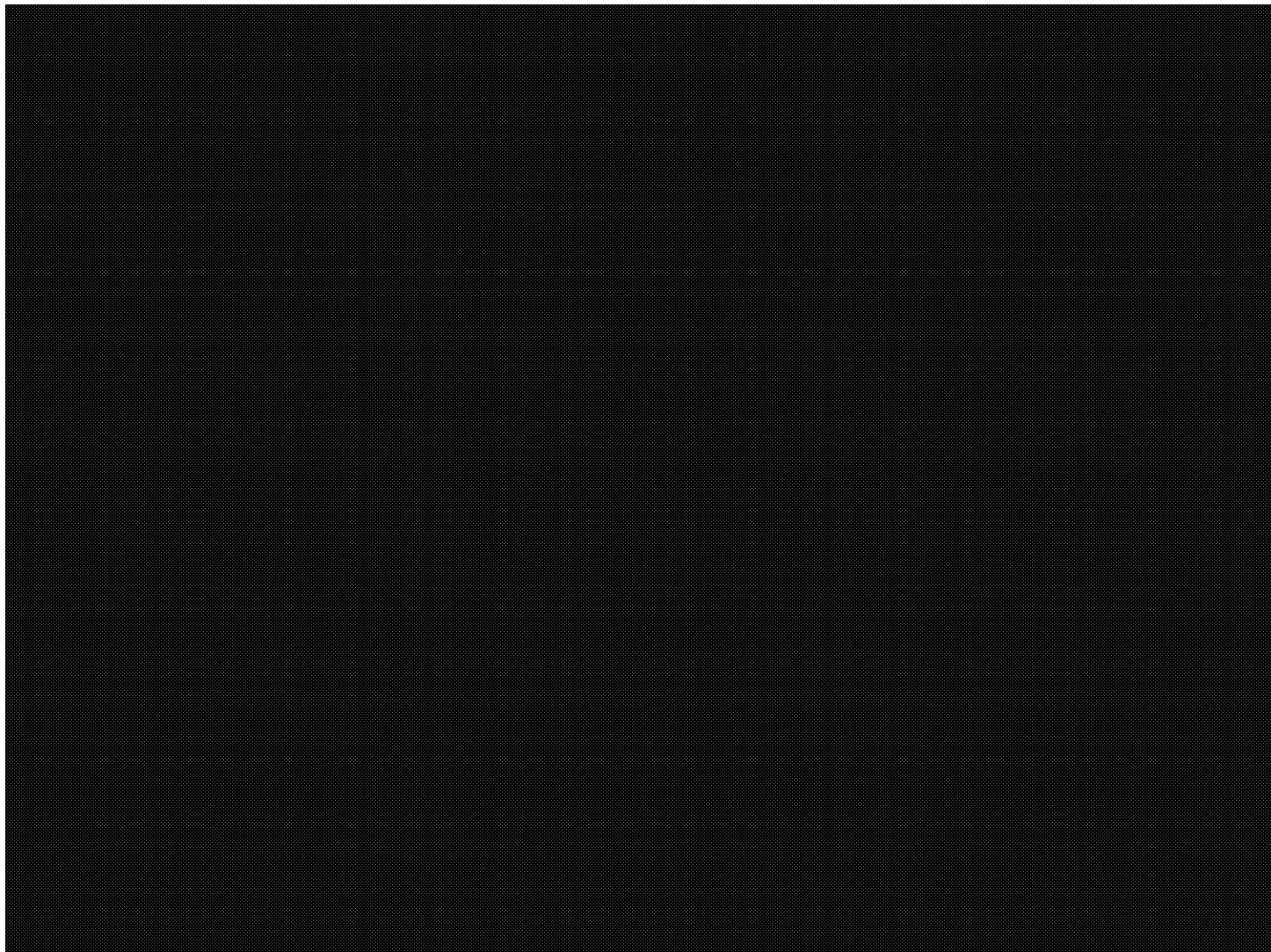
----- Forwarded message -----

From: **Mark Toohey** Personal Email / Ex. 6 @gmail.com>

Date: Tue, Apr 18, 2017 at 8:25 PM

Subject: April 11, 2017 Open Burning At Holston Army Ammunition Plant-Photo for your records

To: Ronnie Wilhoit <ronnie.wilhoit@tn.gov>



[attachment "OB-OD-AlternativesEvaluation-Netherlands-2008.pdf" deleted by Diane Dopkin/Emsus]  
[attachment "Canadian-Demil-Review-Poulin-2010.pdf" deleted by Diane Dopkin/Emsus]